

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re Application of

Atty. Docket

ROBERT ALBERTUS BRONDIJK

NL 031225

Confirmation No. 8644

Serial No. 10/575,002

Group Art Unit: 2189

Filed: APRIL 6, 2006

Examiner: FAAL, B.

Title: MULTIPLE LAYER OPTICAL DISC, AND DEVICE FOR WRITING SUCH
DISC

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Board of Patent Appeals and Interferences
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

Appellant herewith respectfully presents a Brief on Appeal as
follows, having filed a Notice of Appeal on August 11, 2009:

REAL PARTY IN INTEREST

The real party in interest in this appeal is the assignee of record Koninklijke Philips Electronics N.V., a corporation of The Netherlands having an office and a place of business at Groenewoudseweg 1, Eindhoven, Netherlands 5621 BA.

RELATED APPEALS AND INTERFERENCES

Appellant and the undersigned attorney are not aware of any other appeals or interferences which will directly affect or be directly affected by or having a bearing on the Board's decision in the pending appeal.

STATUS OF CLAIMS

Claims 1-3 and 5-28 are pending in this application, where claim 4 is canceled and claims 9-10 and 15-25 are allowed. Claims 1-3, 5-8, 11-14 and 26-28 are rejected in the Final Office Action mailed on May 11, 2009. This rejection was upheld in an Advisory Action mailed on August 7, 2009. Claims 1-3, 5-8, 11-14 and 26-28 are the subject of this appeal.

STATUS OF AMENDMENTS

Appellant filed on July 13, 2009 an after final amendment in response to a Final Office Action mailed May 11, 2009. The after final amendment canceled claim 4 and did not include any other amendments. In an Advisory Action mailed on August 7, 2009, it is indicated that the after final amendment filed on July 13, 2009 will be entered, but does not place the application in condition for allowance. This Appeal Brief is in response to the Final Office Action mailed May 11, 2009, that finally rejected claims 1-3, 5-8, 11-14 and 26-28, which remain finally rejected in the Advisory Action mailed on August 7, 2009.

SUMMARY OF THE CLAIMED SUBJECT MATTER

The present invention, for example, as recited in independent claim 1, shown in FIGs 1-3, and described on page 5, line 21 to page 6, line 14 of the specification, is directed to a medium access device 10 capable of writing information in a logical storage space LSS of a storage medium 2 which has a physical storage space 3 comprising two or more layers L0, L1 of physical storage locations 4. As shown in FIG 2A, and described on page 6, lines 5-22, each storage location 4 has a physical address PA. The logical storage space LSS comprises storage locations within a first one L0 of the layers and within a subsequent one L1 of the layers. The storage locations in the logical storage space LSS have contiguously numbered logical addresses LA. As shown in FIG 1, and described on page 7, lines 24-31 of the specification, the medium access device 10 has an address limit memory 12 that contains at least a value for a parameter LAm_{ax} indicating the maximum value of the logical addresses LA of the storage locations 4 in the first storage layer L0. The medium access device 10

comprises means for changing the maximum value in its address limit memory 12, as shown in FIGs 1 and 5, and described on page 9, lines 17-20, for example, where the medium access device 10 reads a predetermined location of a new disc 2 [FIG 5, step 121] and stores the read value in the address limit memory 12 [FIG 5, step 122]. In another embodiment described on page 8, lines 28-30, the medium access device 10 checks whether it receives a Limit Fix Command LFC [FIG 5, step 141]. If so, then the medium access device 10 derives LAm_{ax} from the Limit Fix Command LFC [FIG 5, step 142] and stores this value of LAm_{ax} in its address limit memory 12 [FIG 5, step 143].

The present invention, for example, as recited in independent claim 5, shown in FIGs 1-3, and described on page 5, line 21 to page 6, line 14 of the specification, is directed to a medium access device 10 capable of writing information in a logical storage space LSS of a storage medium 2 which has two or more layers L0, L1 of physical storage locations 4. As shown in FIG 2A,

and described on page 6, lines 5-22, each storage location 4 has a physical address PA. The physical storage space 3 comprises a logical storage space LSS which contains storage locations within a first one L0 of the layers and within a subsequent one L1 of the layers. The storage locations in the logical storage space have contiguously numbered logical addresses LA. As shown in FIGs 1 and 4-5, and described on page 7, lines 24-31; page 8, line 31 to page 9, line 2; and page 9, lines 13-21, the storage medium 2 has at least one predetermined storage location for containing a value for a parameter indicating the maximum value of the logical addresses LA of the storage locations in the first storage layer L0. The medium access device 10 is adapted to read the maximum value LAm_{ax} from the predetermined storage location, to store the maximum value in an address limit memory 12 of the medium access device 10, and to change the maximum value LAm_{ax} so that a transition from the first storage layer L0 to a next storage layer L1 corresponds to a video cell boundary 34, as shown in FIGs 3-4 and described on page 7, lines 5-10 of the specification.

The present invention, for example, as recited in independent claim 11, shown in FIGs 1-3, and described on page 5, line 21 to page 6, line 14 of the specification, is directed to a data storage system 1 comprising a writeable storage medium 2 having a physical storage space 3 including two or more layers L0, L1 of physical storage locations 4. As shown in FIG 2A, and described on page 6, lines 5-22, each storage location 4 has a physical address PA. The physical storage space 30 comprises a logical storage space LSS which contains storage locations within a first one L0 of the layers and within a subsequent one L1 of the layers. The storage locations in the logical storage space LSS have contiguously numbered logical addresses LA. As shown in FIG 1, and described on page 5, line 21-30 of the specification, the system 1 further comprises a medium access device 10 capable of writing information in a logical storage space LSS of the writeable storage medium 2, and a host device 20 capable of cooperating with the medium access device 10. As shown in FIG 1, and described on page 7, lines 24-31 of the specification, the medium access device 10 has an address

limit memory 12 containing at least a value for a parameter indicating a maximum value LAm_{ax} of the logical addresses of the storage locations in the first storage layer L0. The medium access device 10 comprises means for changing the value in the address limit memory 12, as shown in FIGs 1 and 5, and described on page 9, lines 17-20, for example, where the medium access device 10 reads a predetermined location of a new disc 2 [FIG 5, step 121] and stores the read value in the address limit memory 12 [FIG 5, step 122]. In another embodiment described on page 8, lines 28-30, the medium access device 10 checks whether it receives a Limit Fix Command LFC [FIG 5, step 141]. If so, then the medium access device 10 derives LAm_{ax} from the Limit Fix Command LFC [FIG 5, step 142] and stores this value of LAm_{ax} in its address limit memory 12 [FIG 5, step 143].

The present invention, for example, as recited in independent claim 26, shown in FIGs 1-5, and described on page 5, line 21 to page 6, line 14; page 8, lines 28-30 and page 9, lines 13-21 of the

specification, is directed to a system 1 comprising a disc drive 10 configured to read from a storage medium 2 a maximum value L_{Amax} of logical addresses LA of the storage medium 2 [FIG 5, step 121], and to store the maximum value L_{Amax} in a memory 12 of the disc drive 10 [FIG 5, step 122]. The storage medium 2 has a first storage layer L₀ and a second storage layer L₁, as shown in FIGS 2-4 and described on page 6, lines 1-10. As shown in FIGS 1 and 3-4, and described on page 5, line 21-30 and page 7, lines 5-10 of the specification, the system 1 further comprises a host device 20 configured to provide data organized in cells 35 for writing the data on the storage medium 2 and to determine cell boundaries 34 of the cells 35. As shown in FIGS 1 and 4-5, and described on page 8, line 16 to page 9, line 2; and page 9, lines 13-21, the host device 20 is further configured to determine a desired maximum value of the logical addresses LA so that a transition from the first storage layer L₀ to the second storage layer L₁ corresponds to a video cell boundary 34, and to provide the desired maximum value to the disc drive 10 for changing the maximum value L_{Amax} stored in a memory 12 to the desired maximum value.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Whether claims 1-3, 5-8, 11-14 and 26-28 of U.S. Patent
Application Serial No. 10/575,002 are unpatentable under 35 U.S.C.
§103(a) over Applicant Admitted Prior Art (AAPA) in view of JP
2000-285609 (Tsuchiya).

ARGUMENT

Claims 1-3, 5-8, 11-14 and 26-28 are said to be unpatentable under 35 U.S.C. §103(a) over AAPA in view of Tsuchiya.

Appellant respectfully requests the Board to address the patentability of independent claims 1, 5, 11 and 26, and further claims 2-3, 6-8, 12-14 and 27-28 as depending from claims 1, 11 and 26, based on the requirements of independent claims 1, 11 and 26. This position is provided for the specific and stated purpose of simplifying the current issues on appeal. However, Appellant herein specifically reserves the right to argue and address the patentability of claims 2-3, 6-8, 12-14 and 27-28 at a later date should the separately patentable subject matter of claims 2-3, 6-8, 12-14 and 27-28 later become an issue. Accordingly, this limitation of the subject matter presented for appeal herein, specifically limited to discussions of the patentability of claims 1, 5, 11 and 26 is not intended as a waiver of Appellant's right to argue the patentability of the further claims and claim elements at that later time.

Tsuchiya is directed to recording data, where the border of a recorded data is changed to coincide with the layer boundary (LB).

It is respectfully submitted that AAPA, Tsuchiya, and combination thereof, do not disclose or suggest the present invention as recited in independent claim 1, and similarly recited in independent claims 5, 11 and 26 which, amongst other patentable elements, recites (illustrative emphasis provided):

the medium access device having an address limit memory containing at least a value for a parameter indicating the maximum value of the logical addresses of the storage locations in the said first storage layer;

the medium access device comprising means for changing the maximum value in said address limit memory.

Changing the maximum value in the address limit memory of a medium access device is nowhere disclosed or suggested in AAPA and Tsuchiya, alone or in combination. Appellant concedes that Tsuchiya discloses that the border of a recorded data is changed to coincide with the layer boundary, which is a similar result as the result of the present application. However, there are many ways to achieve a particular result. For example, the maximum value may be ignored, or a different variable or flag may be set or used. The present inventions as recited in independent claims 1, 5, 11 and 26 requires a particular way to achieve the result, namely, to change

the maximum value. AAPA and Tsuchiya, alone or in combination so not disclose or suggest changing the maximum value, as recited in independent claims 1, 5, 11 and 26.

In Tsuchiya, the boundaries are made to coincide using offset, such as described in paragraphs [0027]-[0030], [0034]-[0036] and [0045]-[0046], instead of using null padding that requires cumbersome repeated multiplexing, as described in paragraphs [0008]-[0011]. Tsuchiya does not even disclose or suggest a maximum value for anything, let alone disclosing or suggesting "means for changing the maximum value in said address limit memory," as recited in independent claim 1, and similarly recited in independent claims 5, 11 and 26.

Even if, assuming arguendo, that the combination of AARP and Tsuchiya discloses a maximum value, there is still no disclosure or suggestion in AARP and Tsuchiya, alone or in combination, of any "means for changing the maximum value in said address limit memory," as recited in independent claim 1, and similarly recited in independent claims 5, 11 and 26.

In the Advisory Action of August 7, 2009, it is correctly

noted that Tsuchiya discloses that the border of a recorded data is changed to coincide with the layer boundary, which is a similar result as the result of the present application. However, as discussed above, there are many ways to achieve a particular result, where the result is making the boundaries of the data and disc layer coincide.

The Advisory Action alleges that the claims do not recite the particular way of making the boundaries of the data and disc layer coincide. Appellant respectfully disagrees and submits that independent claim 1 specifically recite, with similar recitation in independent claims 5, 11 and 26, "the medium access device comprising means for changing the maximum value in said address limit memory." Tsuchiya makes the boundaries coincide by using offset, instead of the particular way recited in independent claims 1, 5, 11 and 26, namely, by changing the maximum value in said address limit memory.

Accordingly, it is respectfully requested that independent claims 1, 5, 11 and 26 be allowed. In addition, it is respectfully submitted that claims 2-3, 6-8, 12-14 and 27-28 should also be

allowed at least based on their dependence from independent claims 1, 11 and 26 as well as their individually patentable elements.

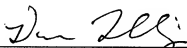
In addition, Appellant denies any statement, position or averment of the Examiner that is not specifically addressed by the foregoing argument and response. Any rejections and/or points of argument not addressed would appear to be moot in view of the presented remarks. However, Appellant reserves the right to submit further arguments in support of the above stated position, should that become necessary. No arguments are waived and none of the Examiner's statements are conceded.

CONCLUSION

Claims 1-3, 5-8, 11-14 and 26-28 are patentable over AAPA and Tsuchiya.

Thus, the Examiner's rejections of claims 1-3, 5-8, 11-14 and 26-28 should be reversed.

Respectfully submitted,

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CLAIMS APPENDIX

1. (Previously Presented) A medium access device capable of writing information in a logical storage space of a storage medium which has a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the logical storage space comprising storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses;

the medium access device having an address limit memory containing at least a value for a parameter indicating the maximum value of the logical addresses of the storage locations in the said first storage layer;

the medium access device comprising means for changing the maximum value in said address limit memory.

2. (Previously Presented) The medium access device according to claim 1, adapted to compare the logical address of the current

block with the maximum value stored in the address limit memory while writing in said first storage layer and, if the result of this comparison shows that the maximum value has been reached for said first storage layer, to make a transition to the first available block in the next storage layer.

3. (Previously Presented) The medium access device according to claim 1, adapted to store the maximum value in the address limit memory and to write the maximum value to a predetermined storage location of said storage medium.

Claim 4 (Canceled)

5. (Previously Presented) A medium access device capable of writing information in the logical storage space of a storage medium, having two or more layers of physical storage locations, each storage location having a physical address, the physical storage space comprising a logical storage space which contains storage locations within a first one of said layers and within a

subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses; the storage medium having at least one predetermined storage location for containing a value for a parameter indicating the maximum value of the logical addresses of the storage locations in the said first storage layer, the medium access device being adapted to read the maximum value from said predetermined storage location, to store the maximum value in an address limit memory of the medium access device, and to change the maximum value so that a transition from said first storage layer to a next storage layer corresponds to a video cell boundary.

6. (Previously Presented) A host device capable of cooperating with the medium access device according to claim 1, the host device being adapted to send data to said medium access device, the data containing information to be written on said medium and/or containing instructions for said medium access device;

the host device being adapted to send a limit fix command to said medium access device for instructing said medium access device

to store a host-determined value in the address limit memory.

7. (Previously Presented) The host device according to claim 6, adapted to send a video signal to said medium access device, the host device being capable of evaluating the video signal to be written so as to determine where cell boundaries in this video signal are to be expected, to calculate a suitable value for said parameter such that a block for which it holds that a logical address is equal to the maximum value corresponds to a cell boundary, and to send a limit fix command to said medium access device for instructing said medium access device to store said calculated value into the address limit memory.

8. (Previously Presented) The medium access device according to claim 1, capable of cooperating with a host device, the medium access device being adapted to receive a limit fix command from said host device and, in response, to derive the maximum value from said limit fix command and to store the derived maximum value in the address limit memory.

9. (Previously Presented) A host device capable of cooperating with a medium access device capable of writing information in a logical storage space of a storage medium which has a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the logical storage space comprising storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses;

the medium access device having an address limit memory containing at least a value for a parameter indicating the maximum value of the logical addresses of the storage locations in the said first storage layer;

the medium access device comprising means for changing the value in said address limit memory;

the host device being adapted to send data to said medium access device, the data containing information to be written on said medium and/or containing instructions for said medium access

device;

the host device being adapted to send a limit fix command to said medium access device for instructing said medium access device to store a host-determined value in the address limit memory;

wherein the host device is further adapted to send a Disc Read Command to said medium access device and to receive a Disc Read Response from said medium access device, indicating whether or not said parameter is changeable by indicating that said parameter has already been set to a certain host-determined value;

the host device being further adapted to avoid sending the limit fix command in response to receiving a Disc Read Response from said medium access device indicating that said parameter cannot be changed.

10. (Previously Presented) A medium access device capable of cooperating with the host device according to claim 9, the medium access device being adapted to receive a Disc Read Command from said host device and, in response, to read the value for said parameter from said predetermined storage location, and to send to

the host device a Disc Read Response containing information from which said parameter can be derived.

11. (Previously Presented) A data storage system comprising:
a writeable storage medium having a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the physical storage space comprising a logical storage space which contains storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses;

a medium access device capable of writing information in a logical storage space of the writeable storage medium which has a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the logical storage space comprising storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses; the medium access device

having an address limit memory containing at least a value for a parameter indicating a maximum value of the logical addresses of the storage locations in the said first storage layer; the medium access device comprising means for changing the value in said address limit memory; and

a host device capable of cooperating with said medium access device.

12. (Previously Presented) The data storage system according to claim 11, comprising a storage medium having a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the physical storage space comprising a logical storage space which contains storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses; the storage medium having at least one predetermined storage location for containing a value for a parameter indicating a maximum value of the logical addresses of the storage locations

in the said first storage layer and a medium access device capable of writing information in the logical storage space of the storage medium the device being adapted to read the value for said parameter from said predetermined storage location and to store this value in its address limit memory.

13. (Previously Presented) The data storage system according to claim 11, wherein said storage medium is an optical disc, and wherein said medium access device is a disc drive.

14. (Previously Presented) The data storage system according to claim 11, comprising a host device the host device being adapted to send data to said medium access device, the data containing information to be written on said medium and/or containing instructions for said medium access device; the host device being adapted to send a limit fix command to said medium access device for instructing said medium access device to store a host-determined value in its address limit memory and a medium access device adapted to receive a limit fix command from said host device

and, in response, to derive the maximum value from said limit fix command and to store the derived maximum value in its address limit memory.

15. (Previously Presented) A data storage system comprising:
a writeable storage medium having a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the physical storage space comprising a logical storage space which contains storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses;

a medium access device capable of writing information in a logical storage space of the writeable storage medium which has a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the logical storage space comprising storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having

contiguously numbered logical addresses; the medium access device having an address limit memory containing at least a value for a parameter indicating a maximum value of the logical addresses of the storage locations in the said first storage layer; the medium access device comprising means for changing the value in said address limit memory; and

a host device capable of cooperating with said medium access device and being adapted to send data to said medium access device, the data containing information to be written on said medium and/or containing instructions for said medium access device;

the host device being further adapted to send a limit fix command to said medium access device for instructing said medium access device to store a host-determined value in its address limit memory and a medium access device adapted to receive a limit fix command from said host device and, in response, to derive the maximum value from said limit fix command and to store the derived maximum value in its address limit memory;

wherein said limit fix command is sent as a modified RESERVE TRACK command.

16. (Previously Presented) The data storage system according to claim 15, wherein the value of bit 0 of byte 1 of the RESERVE TRACK command indicates that this command is to be interpreted as a limit fix command, and wherein the bytes 5 to 8 of the RESERVE TRACK command contain the maximum value.

17. (Previously Presented) A data storage system comprising:
a writeable storage medium having a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the physical storage space comprising a logical storage space which contains storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses;

a medium access device capable of writing information in a logical storage space of the writeable storage medium which has a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address,

the logical storage space comprising storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses; the medium access device having an address limit memory containing at least a value for a parameter indicating a maximum value of the logical addresses of the storage locations in the said first storage layer; the medium access device comprising means for changing the value in said address limit memory; and

a host device capable of cooperating with said medium access device and being adapted to send data to said medium access device, the data containing information to be written on said medium and/or containing instructions for said medium access device;

the host device being further adapted to send a limit fix command to said medium access device for instructing said medium access device to store a host-determined value in its address limit memory and a medium access device adapted to receive a limit fix command from said host device and, in response, to derive the maximum value from said limit fix command and to store the derived

maximum value in its address limit memory;

wherein said limit fix command is sent as a modified WRITE
PARAMETERS PAGE command.

18. (Previously Presented) The data storage system according to claim 17, wherein the value of bit 6 of byte 0 of the WRITE PARAMETERS PAGE command indicates that this command is to be interpreted as a limit fix command, and wherein the bytes 32 to 47 of the WRITE PARAMETERS PAGE command contain the maximum value.

19. (Previously Presented) A data storage system comprising:
a writeable storage medium having a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the physical storage space comprising a logical storage space which contains storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses;
a medium access device capable of writing information in a

logical storage space of the writeable storage medium which has a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the logical storage space comprising storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses; the medium access device having an address limit memory containing at least a value for a parameter indicating a maximum value of the logical addresses of the storage locations in the said first storage layer; the medium access device comprising means for changing the value in said address limit memory; and

a host device capable of cooperating with said medium access device and being adapted to send data to said medium access device, the data containing information to be written on said medium and/or containing instructions for said medium access device;

the host device being further adapted to send a limit fix command to said medium access device for instructing said medium access device to store a host-determined value in its address limit

memory and a medium access device adapted to receive a limit fix command from said host device and, in response, to derive the maximum value from said limit fix command and to store the derived maximum value in its address limit memory;

wherein said limit fix command is sent as a modified SEND DVD STRUCTURE command.

20. (Previously Presented) The data storage system according to claim 19, wherein value 20h for byte 7 indicates that the SEND DVD STRUCTURE command contains 17 bytes, and that bytes 14-16 contain the maximum value.

21. (Previously Presented) A data storage system comprising:
a writeable storage medium having a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the physical storage space comprising a logical storage space which contains storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage

space having contiguously numbered logical addresses;

a medium access device capable of writing information in a logical storage space of the writeable storage medium which has a physical storage space comprising two or more layers of physical storage locations, each storage location having a physical address, the logical storage space comprising storage locations within a first one of said layers and within a subsequent one of said layers, the storage locations in said logical storage space having contiguously numbered logical addresses; the medium access device having an address limit memory containing at least a value for a parameter indicating a maximum value of the logical addresses of the storage locations in the said first storage layer; the medium access device comprising means for changing the value in said address limit memory; and

a host device capable of cooperating with said medium access device and being adapted to send a Disc Read Command to said medium access device and to receive a Disc Read Response from said medium access device, indicating whether or not said parameter is changeable by indicating that said parameter has already been set

to a certain host-determined value;

the host device being further adapted to avoid sending the limit fix command in response to receiving a Disc Read Response from said medium access device indicating that said parameter cannot be changed and a medium access device , the access device being designed adapted to receive a Disc Read Command from said host device and, in response, to read the value for said parameter from said predetermined storage location, and to send to the host device a Disc Read Response containing information from which said parameter can be derived.

22.(Previously Presented) The data storage system according to claim 21, wherein said Disc Read Command is sent as a modified READ DVD STRUCTURE command.

23.(Previously Presented) The data storage system according to claim 22, wherein value 20h for byte 7 indicates that the modified READ DVD STRUCTURE command is to be taken as a Disc Read Command.

24. (Previously Presented) The data storage system according to claim 21, wherein said Disc Read Response is sent as modified Read DVD Structure Data.

25. (Previously Presented) The data storage system according to claim 24, wherein bytes 2 4 of a "DVD Lead-in Structure" field are used to convey information indicating whether or not said parameter is changeable.

26. (Previously Presented) A system comprising:

a disc drive configured to read from a storage medium a maximum value of logical addresses of the storage medium, and to store the maximum value in a memory of the disc drive, the storage medium having a first storage layer and a second storage layer;

a host device configured to provide data organized in cells for writing the data on the storage medium and to determine cell boundaries of the cells, the host device being further configured to determine a desired maximum value of the logical addresses so

that a transition from the first storage layer to the second storage layer corresponds to a video cell boundary, and to provide the desired maximum value to the disc drive for changing the maximum value stored in a memory to the desired maximum value.

27. (Previously Presented) The system of claim 26, wherein the disc drive further configured to store the desired maximum value on the storage medium.

28. (Previously Presented) The system of claim 26, wherein the host device is further configured to determine a desired address value for a last logical address in the first storage layer so that a transition from the first storage layer to the second storage layer corresponds to a video cell boundary, and wherein the disc drive is further configured to determine the desired maximum value from the desired address value.

EVIDENCE APPENDIX

None

Patent
Serial No. 10/575,002
Appeal Brief in Reply to the Final Office Action of May 11, 2009
and the Advisory Action of August 7, 2009

RELATED PROCEEDINGS APPENDIX

None